

### **REMARKS**

Claim 6 is amended to reinforce that the source code for the Web page includes a question, *separately* stored from an answer to that question, which is stored in a definition file for an applet embedded in the Web page. Dependent claims 23-28 have been added, and no claims have been deleted or amended. The subject matter of claims 23-28 can be found throughout the original application as filed, including original claims 3-5, Figures 4-6, page 11, line 20-page 12, line 7. *No new matter has been added.* Claims 6-8, 11-13 and 23-27 are pending, of which claims 6 and 11 are independent. The following comments address all stated ground for rejection and place the presently pending claims, as identified above, in condition for allowance.

### **Claim Rejections Under 35 U.S.C. §102(a)**

In the Office Action, the Examiner rejects claims 6-8 and 11-13 under 35 U.S.C. 102(a) as being anticipated by web pages downloaded from [www.ideaplace.org/tester/fbmaking.html](http://www.ideaplace.org/tester/fbmaking.html) on July 31, 2003 (hereinafter "the Bolton reference"). Applicant respectfully traverses the rejection and submit that the pending claims distinguish patentably over the Bolton reference. The Bolton reference fails to disclose each and every element of claims 6-8 and 11-13.

### **Summary of Claimed Invention**

Independent claim 6 (and claims 7-8 and 23-28, which are dependent thereon) is directed to a method performed in an electronic device that provides an on-line educational course. An electronic device receives a request for a Web page from a remote client and, in response, sends a Web page to the requesting remote client device. The web page contains a question and an embedded fill-in-the-blank applet. The applet generates a graphical user interface that includes instructions to a user to enter an answer to the question provided by the Web page. The applet further includes a definition file, which is separate from the source code for the web page and is unavailable to the user. The definition file defines a correct answer to the question and is separate from a source code for the web page containing the question and the applet to prevent a user from obtaining the correct answer by viewing the source code. Therefore, a question to be displayed to the user and a correct answer to that question, to be entered by a user, are stored separately.

Independent claim 11 (and claims 12-13 which are dependent thereon) is directed to a computer readable medium for use in an electronic device that provides an on-line educational course. The claimed computer readable medium includes instructions for running a fill-in-the-blank applet for displaying a question and a text box to a user. With the applet running, the user can enter an answer to the question in the text box. The computer readable medium further includes hyper-text mark-up language (HTML) code, which includes the question, to reference the applet. The computer readable medium also includes a definition file. The definition file is unavailable to the user and indicates a correct answer for the question presented. The definition file is separate from the HTML code including the question to prevent the user from obtaining the correct answer by viewing the HTML code.

#### The Bolton Reference

Bolton discloses a test administered by an applet. The test is saved as a text file and displayed on a graphical user interface. The Bolton reference does not disclose that the test is sent to a remote client as a Web page containing a question and a fill-in-the-blank applet embedded therein, as recited in independent claim 6. The Bolton reference also does not disclose, teach or suggest *source code* including a question displayed to a user and answered using an applet embedded with the source code, as recited in claims 6 and 11. The Bolton reference also does not disclose an applet having a definition file including an answer to a question to be displayed by a Web page that is separate from the source code *including the question*, resulting in an answer and associated question being stored separately, as recited in independent claims 6 and 11. Rather, the Bolton reference requires a question and associated answer for an applet to be stored together in a text file, rather than the question provided separately in the Web page source code.

Enclosed herewith as an Appendix is a copy of the test-making instructions for the “fill-in-the-blank tests”, which is linked from page 1 of the Bolton reference. As specifically set forth in the instructions, the “Fill-in-the-Blank” test is saved as a text file, an example of which is provided. The text file includes both the question and the answer for all questions in the test. In particular, the text file in the Bolton reference designates each term with an asterisk (\*) and each definition following the term with a hash (#) in front of the definition. Not only does the text file store both the question and answer in the same file, the question and answer are stored *side-*

*by-side*. Therefore, a user who gains access to the questions through the text file can easily gain access to the answers. The Bolton reference clearly does not teach and in fact teaches away from an applet having answers stored separately from question and inaccessible to a user, as required by claims 6 and 11.

The Bolton reference also fails to disclose source code for a Web page embedding an applet that includes a question associated with the applet. The “SciQuizFB[1]” code on page 3 of the Bolton reference is for the Web page surrounding the applet, but does not include the question to be answered by a user. In contrast, independent claims 6 and 11 require that the *source code* for the Web page containing the applet include the question. In this manner, the question is static on the Web page during interaction with the applet, but separately stored from the associated answer. The location of the question as part of the Web page allows for the feedback to the user regarding the correct answer to be provided in a separate, interactive location controlled by the applet, with the question remaining visible to the user throughout the interaction to facilitate the learning process and reinforce the knowledge tested by the question, a feature not shown in Bolton.

For at least these reasons, claims 6-8 and 11-13 distinguish patentably over the Bolton reference.

### **New Claims**

New claims 23-28 have been added to more fully capture the invention, and depend from independent claim 6. Because claim 6 distinguishes patentably over the Bolton reference, claims 23-28 are also allowable. In addition, claims 23-28 recite additional, patentable features not taught or suggested by the Bolton reference.

For example, web pages of Bolton do not disclose an interactive fill-in-the-blank applet that generates a graphical user interface displaying two or more selectable graphical user interface objects for use by a user to interact with the applet, as recited in claim 23. This feature of the invention can be important in a testing environment where a student is being examined using one embodiment of the on-line educational course of Applicant’s invention. The two or more selectable graphical user interface objects, such as the “check” and “reset” buttons in one illustrative embodiment of the invention shown in Figures 3-7, facilitate interaction between the

fill-in-the-blank applet and the user allowing, at a minimum, the user to clear an entry or to submit an entry for evaluation by the applet, using one click of a mouse button. In this manner, the user can clear an answer using a single point and click operation or submit an answer using a single point and click operation.

The applet disclosed in the Bolton reference does not allow for the user to have repeat tries, as recited in claims 24-25. The ability to attempt a correct answer multiple times allows a student more opportunities to obtain the right answer for more difficult questions, and further reinforces the learning process. In contrast, the Bolton reference only allows a user a single attempt at a correct answer before providing the correct response.

The Bolton reference also does not anticipate the subject matter of claim 26, which specifies that the applet prevents the user from entering an answer after a predetermined number of attempts. In contrast, a user may still enter an answer in the text box in Bolton until the user presses “return” to continue, as instructed by the test.

The Bolton reference also does not disclose an applet having *multiple* possible correct answers for a question, as recited in claim 27. The ability to have multiple correct answers allows for variations in spelling, case sensitivity or synonymous terms, crediting a user for substantially correct answers without penalizing a user for misspellings or other non-substantial deviations.

The Bolton reference also does not disclose an applet that provides feedback to a user indicating that an answer to the question is correct, if the user inputs a correct answer, as recited in claim 28. Rather, the Bolton applet continues automatically to the next question upon entry of a correct answer without stating that the answer is correct, which may prevent a user from absorbing the correct response. For example, if a user accidentally or thoughtlessly enters the correct answer, the user may not actually know what the answer was before the next question begins, frustrating the learning process.

Therefore, claims 23-28 are also independently patentable over the Bolton reference.


**CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Applicant believes no fee is due with this statement. However, if a fee is due, please charge our Deposit Account No. 12-0080, under Order No. SMQ-059 from which the undersigned is authorized to draw.

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Respectfully submitted,

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